

Amendments to the Claims

The listing of claims replaces the previous version, and the listing of claims:

Listing of Claims

1. (currently amended) A plasma-enhanced processing apparatus, comprising;

a process chamber for processing a substrate therein having a wall,

a pumping system communicating with said process chamber for exhausting gas in the process chamber,

a gas-introduction system that introduces process gas into said process chamber,

plasma-generation means that generates plasma in said process chamber by applying energy to said process gas,

a substrate holder that holds said substrate in said process chamber, and

an opposite electrode disposed in the process chamber to face said substrate held by said substrate holder, and including a front board facing the substrate holder, a clamping plate disposed at a front side of the front board close to the substrate holder so that an area of the front board not covered by the clamping plate is exposed to plasma, and a main body installed on the wall of the process chamber and disposed at a back side of the front board opposite to the front side so that said front board is clamped between the clamping plate and the main body,

said clamping plate being fixed so that said clamping plate presses said front board toward said main body and a back surface of the front board is ~~contacted~~ and pressed uniformly onto the main body,

said front board being fixed to said main body by pressure of said clamping plate toward said main body with no screw penetrating said front board,

said front board having a stepped portion at a periphery thereof that is sandwiched by said main body and said clamping plate,

a front surface of said clamping plate exposed to the plasma is on a same plane as the front surface of the front board.

2. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 1, wherein said opposite electrode includes a cooling mechanism that cools said front board via said main body.

3. (currently amended, withdrawn) A plasma-enhanced processing apparatus as claimed in claim 1, wherein said clamping plate is in surface contact with said front board to clamp the ~~a~~ periphery of the front board.

4. (cancelled)

5. (currently amended) A plasma-enhanced processing apparatus, comprising;

a process chamber for processing a substrate therein having a wall,

a pumping system communicating with said process chamber for exhausting gas in the process chamber,

a gas-introduction system that introduces process gas into said process chamber,

plasma-generation means that generates plasma in said process chamber by applying energy to said process gas,

a substrate holder that holds said substrate in said process chamber,

an opposite electrode disposed in the process chamber to face said substrate held by said substrate holder, and including a front board facing the substrate holder, a clamping plate disposed at a front side of the front board close to the substrate holder so that an area of the front board not covered by the clamping plate is exposed to plasma, and a main body installed on the wall of the process chamber and disposed at a back side of the front board opposite to the front side so that said front board is clamped between the clamping plate and the main body,

said clamping plate being fixed so that said clamping plate presses said front board toward said main body and a back surface of the front board is pressed uniformly onto the main body,

said front board being fixed to said main body by pressure of said clamping plate toward said main body with no screw penetrating said front board, and

further comprising a protector covering a front surface of said clamping plate so that said front surface of the clamping plate is not exposed to said plasma.

6. (currently amended) A plasma-enhanced processing apparatus as claimed in claim 5, wherein said front board has a stepped portion at a periphery sandwiched by the main body and the clamping plate, the protector is located on the stepped portion ~~a back surface of a protector contacting the front surface of the clamping plate,~~ and a front surface of the protector is on the same plane as the front surface of said front board.

7. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 6, wherein said front board is made of silicon poly-crystal or silicon mono-crystal.

8. (currently amended, withdrawn) A plasma-enhanced processing

apparatus as claimed in claim 3 1, wherein said clamping plate is screwed on a member except said front board to press said front board onto said main body with screwing torque of 1Nm or more.

9. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 6 5, wherein said clamping plate is screwed on a member except said front board to press said front board onto said main body with screwing torque of 1Nm or more.

10. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 6 5, further comprising a sheet made of carbon inserted between said main body and said front board.

11. (cancelled)

12. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 1, further comprising a sheet between the main body and the front board.

13. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 12, wherein said sheet is made of carbon.

14. (previously presented) A plasma-enhanced processing apparatus as claimed in claim 2, wherein said cooling mechanism prevents increase of temperature of the front board in operation.

15-18. (cancelled)

19. (new) A plasma-enhanced processing apparatus as claimed in claim 1, further comprising screws fixing the clamping plate to the opposite electrode, and a protector covering heads of the

screws so that the heads of the screws are not exposed to said plasma, wherein the screws do not contact the front board.

20. (new) A plasma-enhanced processing apparatus as claimed in claim 19, wherein the clamping plate has a stepped portion at a periphery, the screws penetrate the clamping plate at the stepped portion, the protector is located on the stepped portion of the clamping plate, and a front surface of the protector is on a same plane as the front surfaces of the clamping plate and the front board.

21. (new) A plasma-enhanced processing apparatus as claimed in claim 5, further comprising screws fixing the clamping plate to the opposite electrode, wherein the protector covers heads of the screws so that the heads of the screws are not exposed to said plasma, and the screws do not contact the front board.

22. (new) A plasma-enhanced processing apparatus as claimed in claim 21, wherein the front board has a stepped portion at a periphery thereof that is sandwiched by the main body and the clamping plate, the protector is located in a space formed by the stepped portion of the front board, and a front surface of the protector is on a same plane as the front surface of the front board.

23. (new) A plasma-enhanced processing apparatus as claimed in claim 19, wherein the protector is L-shaped in cross section and has an upright portion and a level portion, the protector is fixed on a side of the opposite electrode at the upright portion by another screw not in contact with the front board, and the protector covers the screws fixing the clamping plate at the level portion.

24. (new) A plasma-enhanced processing apparatus as claimed in claim 21, wherein the protector is L-shaped in cross section and has an upright portion and a level portion, the protector is fixed on a side of the opposite at the upright portion by another screw not in contact with the front board, and the protector covers the clamping plate and the screws at the level portion.

25. (new) A plasma-enhanced processing apparatus as claimed in claim 19, wherein the protector is made of quartz or carbon.

26 (new) A plasma-enhanced processing apparatus as claimed in claim 21, wherein the protector is made of quartz or carbon.